DOCUMENT RESUME

ED 295 067 CG 020 807

AUTHOR Fethke, Carol C.
TITLE Marriage Dissolution, Division of Pensions, and Retirement Economic Well-Being.
PUB DATE Nov 87
NOTE 29p.; Paper presented at the Annual Scientific Meeting of the Gerontological Society (40th, Washington, DC, November 18-22, 1987).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Divorce; *Economic Factors; *Economic Status; Marital Status; *Retirement; Retirement Benefits; Spouses; *Well Being
IDENTIFIERS Savings; *Wealth

ABSTRACT

Economic well-being after retirement depends on an individual's portfolio which includes income from Social Security, pensions, transfers from public or private sources, and accumulated wealth. Any event which interrupts the savings process can have an adverse effect on an individual's economic status after retirement. Dissolution of marriage, which may affect as many as one-third of all families, is such an event. Marriage dissolution may effect the family's savings rate. Property division rules discourage marital savings if either party anticipates divorce. Because most divorces occur early in the individual's lifetime, the impact on retirement savings can be great. The effect of excluding certain assets from the marital property pool creates differences in the expected rate of return between property subject, and not subject, to division. The rate of return to marital property is uncertain, not only because the asset has risk, but also because there is a chance that the other spouse will own the asset after marriage. Actual divorce involves economic costs which further reduce the couple's wealth through legal fees, loss of the value of the imperfect annuity that marriage represents, and loss of access to valuable property rights. Whether divorce interrupts the savings process or destroys assets, it is unlikely that most individuals will be able to save enough in later life to overcome the loss. The long-term effect may well be that in future years, a new category of elderly poor will be recognized, those who have experienced divorce. (Author/ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED295067

CG 020807

Marriage Dissolution, Division of Pensions, and Retirement Economic Well-Being[1]

Carol C. Fethke[2]

Divorce and Later Retirement Well-Being[3]

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Carol C. Fethke

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Abstract

Analysis of the long-term effect of the current high rate of divorce upon the future economic status of individuals has not been throughly explored. This paper reviews the retirement, precautionary, and bequest motives for saving, then evaluates how marriage dissolution may 1) decrease the family's savings rate, 2) cause shifts in the family's portfolio to assets with lower rates of return, and 3) destroy or deplete existing family assets. Whether divorce interrupts the savings process or destroys assets, it is unlikly that most individuals will be able to save enough in later life to overcome the loss. The long-term effect may well be that in future years, we will recognize a new category of elderly poor, those who have experienced the dissolution of their marriage.

MARRIAGE DISSOLUTION, DIVISION OF PENSIONS, AND RETIREMENT ECONOMIC WELL-BEING

Economic well-being after retirement depends on an individual's portfolio which includes income from Social Security, pensions, transfers from public or private sources, and accumulated wealth. Any event which interrupts the savings process can have an adverse effect on an individual's economic status after retirement. Dissolution of marriage, which may affect as many as one-third of all families, is such an event. This paper describes the impacts of marriage dissolution on the savings patterns of families and considers the post-retirement position that may result. The next two sections briefly review the laws by which marriages may be dissolved and the motives for family savings. Three sections then discuss ways in which savings are affected by dissolution. The final section of the paper summarizes and discusses some policy implications of the results.

Overview of Marriage Dissolution in the United States

Most marriages dissolve early in the life-cycle. The median length of marriage, for those that break up is 7 years; the modal length of such marriages is 2 years (Health and Human Services, 1986). The higher divorce rates of today's families means that in the future, the proportion of the older population who will have experienced a divorce will be far larger than that experienced by today's elderly (Morgan, 1986; Preston & McDonald, 1979). To illustrate the future dimension of the problem, Figure 1 and provides the proportion of elderly individuals in the year 2000 who will ever have experienced a divorce (U. S. Bureau of Census, 1984). For individuals then aged 65-69, the proportion is approximately one third of the group. Note also that the proportion of surviving older women who will

have experienced at least one divorce will be slightly larger than that of men.

To understand the impact of divorce on post-retirement well-being, it is helpful to summarize the process. The majority of states permit no-fault dissolution which can unilaterally be initiated by either spouse. Divorce is an adversarial procedure in which the husband and wife must negotiate child custody, property division, and possibly spousal support (alimony). In the dissolution bargaining process, couples seek to reach an optimal agreement on these issues. If agreement cannot be reached, each state prescribes both a definition of the marital property which is subject to division, and imposes a well-defined division rule.

Marital property subject to division is generally defined as real and financial assets acquired by either party during the marriage. However, in the interest of making the definition and valuation problem tractable, some states exclude from court-ordered settlements what sociologist Weitzman (1985) calls "new property," that is, the value of education and human capital, pensions, goodwill of companies, and access to health, life, and accident insurance. In community property states, the most common division rule for marital property is a 50-50 allocation. In other states, the rule is equitable division, where equitable is defined as some combination of the husband's and wife's contribution to the acquisition of property weighted by expected future income, wealth, and economic need.

Following Becker, Landes & Michael (1977), most economic analysis of dissolution has assumed that marriage is a contract which produces a gain for each individual that is greater than the value of being single. Individuals will remain married as long as their expected gain to marriage remains greater than outside opportunities net of transactions costs.

(Becker, 1981; Becker, Landes & Michael, 1977; Landis, 1978; Peters, 1986a). Dissolution can also be modeled as a non-cooperative game (Cooter, Marks & Mnookin, 1982; Fethke, 1984). In such games, restrictively defining the marital property pool to include only assets and liabilities of the marriage may omit one of the largest family assets, the present value of each party's future income stream, but this definition appears to reduce both moral hazard and reputation-building strategies, as well as effectively reducing the court's role in pre-trial bargaining and settlements (Fethke, 1987).

Saving and Consumption Models

An appropriate model to begin the investigation of savings behavior and the potential impact of marriage dissolution on family savings is the life-cycle hypothesis. The model recognizes that income does not necessarily flow into the family at the time and rate that the family needs to meet current expenditures. As such, there will be periods both early and late in the life-cycle when expenditures will exceed income and the family will dissave either by borrowing or using previously acquired assets. Empirical analysis by Kotlikoff and Summers (1981) suggests that prior to age 45, expenditures closely parallel income and there is relatively little savings or dissavings at the aggregate level. Between ages 45 and 60, there is positive savings and from aged 60 on, savings are negative. They used longitudinal age earnings and age-consumption profiles of cohorts from 1900-1974 to build these estimates.

While the simple life-cycle model suggests there will be savings, there is less theoretical agreement about the reasons for this saving. The original life-cycle model (Ando & Modigliani, 1963; Modigliani & Brumberg 1954) emphasized that savings were the result of a need to defer consumption from income-earning years until retirement when income fell, but consumption

was still necessary. Perhaps the greatest objection to the retirement savings motive is the limited evidence that retired individuals actually dissave. For example, using data from the Retirement History Survey, Hurd (1987) reports evidence that only single elderly widows can be found to dissave.

A competing view is that savings is primarily motivated by a desire to protect one's self against future unexpected variations in income, interest rates, or even the uncertainty of one's date of death. Proponents of the precautionary savings motive argue that individuals will consume less at younger ages to build a reserve to meet unexpected adverse future circumstances. The effect of income uncertainty on consumption and savings has been explored by many (e. g. Abel, 1985; Friedman, 1957; Flavin, 1981; Kotlikoff & Summers, 1981; Leland, 1968; and Skinner, 1987). Skinner (1987), for example, using occupational group data from the Consumer Expenditure Survey, estimates that precautionary savings comprise 56 percent of aggregate life-cycle savings.

Finally, savings can be considered an accumulation for intergenerational transfers of wealth. Transfers are either gifts between generations, or bequests at one's death. One motive for such transfers can be altruism in which either parents or children transfer wealth to offset public policies resulting in public debt or future Social Security burdens (Barro, 1974; Becker, 1974). Alternately, parents may get utility from passing on a certain level of bequests (Yaari, 1965). Or, parents may use intergenerational transfers to encourage children to provide then with desired services (Bernheim, Shleifer & Summers, 1985).

Whatever the motive for savings (retirement, precautionary, or intergenerational transfers), all models predict that individuals will defer

current consumption in their younger years. How does the dissolution of a marriage fit into these models? The next sections show how the dissolution rules: 1) can influence a couple's savings rate as they anticipate a dissolution, 2) will shift the structure of the portfolio with which each leaves the marriage, and 3) will erode their current level of wealth. Each of these may ultimately affect one's ability to save after the marriage.

Effects of Dissolution on The Family's Savings Rate

An increase in the subjective probability of divorce can be built into savings/consumption models very much like uncertainty with respect to future income, or the date of one's death, so that at any point in time, both the husband and wife can assess the value of the marriage and the probability of being married in the next period. Since both the amount of property and the composition of the family's portfolio of assets are arguments in the expected utility function of the divorced state, both are, in turn, dependent on how the husband and wife allocate their time and effort during the marriage. Individuals can influence the value of some post-marriage outcomes, (earnings, remarriage, and the size of marital assets) by their choices of time and productive effort. To the degree that each can influence the behavior or demands of their spouse, each may favorably affect their own future state (Leigh, 1985; Peters, 1986b). If dissolution is incorporated in this way, multiperiod models predict that individuals anticipating the end of their marriage will react by building precautionary savings to protect themselves from income uncertainty. Since theory predicts that married persons will save less than single couples, in anticipation of singlehood, one might expect divorcing individuals to increase their savings. But the savings-motive theories do not incorporate property division concepts.

When divorce is introduced into non-cooperative game models, the predicted increase in savings of life-cycle models no longer need result. Fethke (1984) has shown that in an adversarial game, couples who face a longer period of the life-cycle not married than the period of their marriage, will find that there is an incentive not to save during the marriage, or to dissipate marital assets that have been acquired. In two non-cooperative games (Cournot and Stackleberg), it is the state's property division rule which serves to discourage savings. The process works as follows. If either the husband or wife tries to save, it is clear that only a fraction of this savings will become theirs when existing marital property is divided. Moreover, both are aware that although they can retain access to only a part of their savings at the dissolution, either can claim up to 100% of the savings by spending it during the marriage. The net effect of the property division rules, then, is to discourage marital savings if either party anticipates divorce.

Table 1 presents a simple example to illustrate the long-run implications of the theorical prediction that a couple anticipating divorce will reduce their savings. [TABLE 1 ABOUT HERE.] Assume that a husband and wife each save $1,000 in every one of the seven years of their marriage in an asset earning five percent. In column one, the investment income is taxable at the 28 percent marginal rate; in column two, the savings are invested in an individual retirement account (IRA); the IRA income is not taxable until withdrawal. Now, to illustrate clearly the importance of this seven years of savings, let them stop their $1,000 investments after the seventh year, but let the money remain earning interest until age 65 or 70. Table 1 shows the amount available for retirement in each case.

If either increasing expectations of divorce or actual dissolution costs were to reduce this first seven years of savings to zero, the retirement base would not exist. Divorced individuals wishing to save for retirement later in the life-cycle, and wishing to have a savings pool equivalent to what their married counterparts have accumulated, would have to save $1,000 every year for more than 20 years to build this amount. Footnotes C and D at the bottom of Table 1 illustrate the different time spans required to replace the taxable and non-taxable savings instruments. For example, to save $32,111 when the investment return yields 5% and is taxable at 28%, a person would have to save 21.19 years, that is, save $1,000 each year from age 48.81 to age 70.

This illustration is, of course, an example of the power of compound interest and the importance of early savings. The fact that dissolution appears to wipe out such a small sum for young couples belies the importance of the problem. Because most divorces occur early in the individual's lifetime, the impact on retirement savings can be great.

Shifts in the Portfolio of Assets

The effect of excluding certain assets from the marital property pool creates differences in the expected rate of return between property subject, and not subject, to division. The rate of return to marital property is uncertain, not only because the asset has risk, but also because there is a chance that the other spouse will own the asset after the marriage. Theory predicts that a risk-averse individual will save more if returns are uncertain (Hakansson, 1969; Sandmo, 1970). On the other hand, risk-averse individuals will also make every effort to shift assets to property not subject to division. The two most obvious choices are for shifting

investments are changes in human capital and, in states where pensions are not divisible, investments in pensions.

One way to shift assets is to reduce investments in marital capital and to increase one's labor market investment (Becker, 1981). Johnson & Skinner (1986) using data from the Michigan Panel Study of Income Dynamics data have shown that women enter the labor force prior to divorce in just such an effort. The consequence of this shift in investment, however, is that the likelihood of marital breakdown increases as marital investment is reduced.

The effect of dissolution in shifting both the amount and type of pension assets in the husband's and wife's retirement portfolio merits some discussion. According to the Federal Reserve, the largest asset owned by families is the equity in their home, but the most rapidly growing asset is the family's pension. In states in which the pension is included in the marital asset pool, the key issues become how to value and divide the pension at the date of dissolution. Normally, defined contribution plans are valued on the basis of the sum of contributions made during the marriage; division is based on a pro rata share of the final pension payment based on the length of the marriage compared to the total lifetime period of contributions. Explanation of the division of a defined benefit pension is more complex and requires a simple example.

Table 2 provides one illustration of the division of a defined benefit program. Assume that a husband earns $20,000 at age 25 and that his salary increases five percent each year until retirement. We are interested in calculating the wife's share of his pension rights. [TABLE 2 ABOUT HERE] Assume further that the division rule is 50-50 so that the non-income earning wife will receive credit for 1/2 of the earnings during the marriage. Finally, since this is a defined benefit plan, we need a benefit

formula which, for this example, will be two percent of the average salary in the highest three years of earnings, times the number of years being credited. For simplicity, no Social Security offset is built into this example.

Based on the seven years of marriage, the wife's share of her husband's pension is $1,877.68. The calculation is the first term of individual B's case at the bottom of Table 2. Now, if one assumes that after the marriage the wife either immediately participates in a similar program based on her own earnings, or remarries someone with the same earnings profile and defined benefit program as her ex-spouse, then at retirement, her share of accumulated additional pension income rights will be $44,287. Together these total $46,165. The loss in pension income as a result of the divorce can be calculated by comparing her pension equity rights with that which she would have had, had she remained married. This is calculated as individual A in the example; the wealth loss is $7,516 per year of retirement. Under a defined benefit program, the divorce serves to reduce her retirement income in exactly the same way as a change in job would have affected her ex-husband.

While in some states, wives may share in a part of their husband's pension, their retirement portfolio may also include pension and Social Security rights earned in their own name. In recent years, a number of modifications have been made in the regulations of pensions which have been recognized to he helpful to women workers, noteably, reduction in the number of years of work required for vesting, expansion of the definition of which workers must be covered by a company's plan, reduction in the age at which employees must be considered for coverage, and well-defined rules for breaks in service. However, while treatment may be more equalized by these

changes, opportunity for coverage is not. Allen and Clark (1987) point out that workers will find it valuable to purchase pensions when they have incomes high enough to make the tax break on the contributions a significant part of the return. For lower income individuals, this tax break is not as important. Private pensions then, are most likely to exist in industries where incomes are high. For this reason, both service and retail occupations have fewer pension programs; yet these are the areas in which divorced women entering the labor market are most likely to seek or find employment. Finally, most small firms are more likely to have defined contribution pension plans. In these plans a key factor is that the employee bears all the risk of the future returns to the plan's portfolio. Given the October, 1987 drop in the stock market, the economic impact of the employee's risk has become much clearer to everyone.

Dissolution may also change the proportion on one's portfolio represented by Social Security benefits. To have a right to payments equal to 1/2 of one's spouse's Social Security payment, a marriage has to have lasted 10 years. For most couples, this is not the case. However, since many wives seek to reduce future income uncertainty and shift savings to human capital by entering the labor market, the overall effect of dissolution on Social Security retirement benefits will depend on the relative earnings of the husband and wife over their lifetimes, the Aime formula, and the optimal age at which individuals retire (Bernheim, 1987; Burtless, 1986; Feldstein, 1976; Mitchell & Fields, 1982).

Since Social Security may become a more important part of the portfolio of divorced individuals, a second less-recognized but equally important aspect of Social Security must be considered when evaluating the long-run economic consequences of divorce. Boskin and Puffert (1987) have estimated

that the rate of return to Social Security investments will range from 1.9 to 2.7 percent over the lifetime of the cohort who are now in their 40's. The actual rate of return will depend on how the government funds the program, particularly, whether it will maintain the increasing reserve currently planned. This rate of return is well below historical Social Security returns and below the long-term rate of return to other financial assets. Thus, individuals who become more dependent on Social Security because of a marriage dissolution, will earn considerably less on their retirement portfolio than those who have acquired other assets.

Destruction of Assets and Wealth As The Marriage Dissolves

While anticipation of dissolution discourages savings, and causes shifts in the family's savings portfolio, actual divorce involves economic costs which further reduce the couple's wealth. These costs include: 1) legal fees and transactions costs associated with changing roles, 2) loss of the value of the imperfect annuity that marriage represents and 3) loss of access to valuable property rights.

It is relatively easy to see how direct costs of divorce may significantly erode the accumulated savings base of a couple because most couples have little net worth at dissolution. Table 3 provides the income and net worth of couples, and single males and females under 35 years of age in 1984 (Bureau of Census, 1986a). [TABLE 3 ABOUT HERE] These figures do not include pension equity. Both the permanent income hypothesis of Friedman (1957) and Becker's human capital model (1981) predict that young couples will save less than their single counterparts with similar incomes. Since the income and net worth figures for single male and female in Table 3 include individuals never married, one can expect that the values for

individuals single because of divorce, would be even lower than the figures in Table 3 indicate.

Also highly visible in many cases are the costs associated with the forced sale of the family's largest and most indivisible asset, equity in the family home. For couples less than 35 years old who own a home, the median value of equity in 1984 was $9992. The direct costs of selling a home are the real estate fees (averaging six percent of the sale price of the house), closing fees, and taxes. The largest indirect cost may be the need to sell the home in a market unfavorable to the seller. For many couples, these outlays can easily consume most of the existing home equity.

Weitzman (1985) points out yet another possible dissolution cost. In states where the court has judicial discression in property division and there is property to divide, the spouse with greater resources may find it advantageous to shop around or appeal decisions in an effort to gain a more favorable court. This behavior, as well as the fact that there is often a correlation between spouses with fewer resources and spouses with less knowledge of the economic circumstances of the couple, places one partner in a weaker bargaining position and increases the relative costs (in proportion to income and assets) of legal and court fees.

Direct costs of dissolution are not the only negative impacts on family assets. Kotlikoff and Spivak (1981) illustrate a second impact when they describe the family as an incomplete annuities market in which individuals can insure against the uncertainty of their date of death by pooling resources, making joint consumption decisions, and providing for other family members by making them beneficiaries in their wills. The risk-sharing of marriage acts to reduce the future price of consumption, permitting them to spend more than they could otherwise as they get older.

For younger couples, annuity arrangements may be less important because of their lower mortality probabilities. Their higher survival rates act like lower rates of time preference. Nevertheless, the gains from risk pooling permit them to consume more than their single counterparts. The older the individual, the higher the probability of dying and so the greater the value of the family as an annuity. Kotlikoff and Spivak (1981) estimate that for a 30-year old male with a relative risk-aversion parameter of 1.25, a fair annuity is equivalent to a 30.3 percent increase in wealth; for a male aged 55, this same annuity represents an increase in wealth of 59.2 percent. Since marriage is an imperfect annuities market, the value of the gain is less than these perfect annuity wealth effects, but the value is still significant. Kotlikoff and Spivak estimate that the married 30-year old has a 13 percent increase in wealth over his single counterpart. For the married 55-year-old male, there is a 22.3 percent wealth gain. Dissolution destroys this wealth.

Finally, dissolution may destroy one or both of the spouse's access to certain property rights. For example, divorcing spouses will usually remove their ex-spouse as beneficiaries of their life insurance. If these policies have a savings component, more of the couple's savings portfolio becomes inaccessible to one of the two. If the couple have insured the family through the health insurance policy of an employer, then when the marriage dissolves, one spouse will have limited access to health coverage. Under the 1986 COBRA provisions, the employer must provide access to health insurance and this coverage may be available for up to 18 months. However, at some future date, either the uncovered individual has to switch policies and prove insurability, or pay at other than group rates. This is costly and can reduce one party's ability to save.

Dissolution also changes access to both federal and state tax breaks available to couples. The loss of access to these was made less critical with the 1984 tax reform act which imposed uniform federal definitions of property settlements, alimony, and child support (Broude, 1984) and the 1986 tax reform act which removed the marital credit for second incomes. But the basic tax tables in some states still provide some relief for married couples filing jointly over couples filing as single and head of a household. Finally, as a result of the breakup of the marriage, each may find that both access to credit, and the level of the line of credit available are reduced. Thus, what they were able to borrow as a pair, may not be available to either as individuals. This restriction is most likely to affect the lower income individual, but, it is also likely to reduce access to mortgage markets for both husband and wife.

DISCUSSION

In summary, dissolution occurs early in the life-cycle for most couples. Looking at the value of the assets in the marital property pool, one might expect that the dissolution process would not have serious economic effects on retirement well-being. However, theory suggests that married couples save less than their single counterparts. Couples anticipating divorce may save even less than their ever-married counterparts. This paper has shown that since this drop in the savings rate occurs early, it can be costly in terms of retirement preparation. Moreover, as couples each try to shift assets out of the marital property pool, they can encounter liquidity problems, or be forced into assets with lower rates of return. Restrictions on pension division, the methods used to calculate the present value of pension-equity at the dissolution, and the importance of the length of service in calculating pension benefits, all

work to reduce at least one partner's post-retirement well-being. In addition, the divorce process itself imposes costs upon the couple further eroding their wealth base.

To recover from these adverse effects, individuals need to initiate substantial savings programs in the several decades prior to retirement. For women, whose incomes may be low, who are most likely to have less access to private pension programs, and who are likely to be exposed to the risks of the rate of return to defined contribution plans, adequate opportunities to save may be limited.

Individuals who experience a marriage dissolution will be poorer than their counterparts who do not divorce. Even if individuals remarry, the period of their marriage when they reduced their rate of savings, or dissaved, and the direct costs of the dissolution will reduce their long-run economic position. For those who do not remarry, the picture is even less positive. In future years then, there may be a new class of elderly poor, those who have experienced the break up of their marriage. Empirical verification of these predictions will have to await until cohorts with higher rates of marriage dissolution reach retirement age.

Footnotes

[1]This paper was presented at the Gerontological Society of America meetings, November, 1987, in Washington, D.C.

[2]Correspondence should be addressed to:

Carol C. Fethke, Ph.D.

38 Macbride Hall

University of Iowa

Iowa City, IA, 52242

[3]This paper benefited from the comments of several at the AGA meetings; and is a preliminary copy, not for reproduction.

REFERENCES

Abel, Andrew. 1985. "Precautionary Saving and Accidental Bequests." American Economic Review, 75:777-791.

Ando, Albert, and Franco Modigliani. 1963. "The 'Life Cycle' Hypothesis of Saving: Aggregate Implications and Tests." American Economics Review, 53:55-84.

Allen, Steven G., and Robert L. Clark. 1987. "Pension and Firm Performance." National Bureau of Economic Research Working Paper No. 2266.

Barro, Robert J. 1974. "Are Government Bonds Net Wealth?" Journal of Political Economy, 82:1095-1117.

Becker, Gary S. 1964. Human Capital. New York: Columbia University Press.

Becker, Gary S. 1974. "A Theory of Marriage Part II." Journal of Political Economy, 82:11-26.

Becker, Gary S. 1981. A Treatise on the Family. Cambridge: Harvard University Press.

Becker, Gary S., Elizabeth M. Landes and Robert T., Michael. 1977. "An Economic Analysis of Marital Instability." Journal of Political Economy, 85:1141-1187.

Bernheim, B. Douglas, Andrei Shleifer, and Lawrence H. Summers. 1985. "The Strategic Bequest Motive." Journal of Politcal Economy, 93:1045-1076.

Bernheim, B. Douglas. 1987. "The Timing of Retirement: A Comparison of Expectations and Realizations." National Bureau of Economic Research Working Paper No. 2291.

Boskin, Michael J. and Douglas J. Puffert. 1987. "The Financial Input of Social Security by Cohort Under Alternative Financing Assumptions." National Bureau of Economic Research Working Paper No. 2225.

Broude, Donna L. 1984. "The Effect of the Tax Reform Act of 1984 on Divorce Financial Planning." Journal of Family Law, 24:283-300.

Burtless, Gary. 1986. "Social Security, Unanticipated Benefit Increases, and the Timing of Retirement." Review of Economic Studies, LIII:781-805.

Cooter, Robert and Robert H. Mnookin. 1982. "Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior." Journal of Legal Studies, XI:225-251.

Fethke, Carol C. 1984. "An Economic Model of Asset Division in the Dissolution of Marriage." American Economic Review, 74:265-270.

Fethke, Carol C. and Nancy Hauserman. 1988. "Division of Marital Property in a Sequential-Game Framework." Proceedings of the American Statistical Association.

Feldstein, Martin. 1976. "Social Security and The Extended Life Cycle Theory." Journal of Political Economy, 66:77-86

Flavin, Marjorie A. 1981. "The Adjustment of Comsumption to Changing Expectations About Future Income." Journal of Political Economy, 89:974-1009.

Friedman, Milton. 1957. A Theory of the Consumption Function. Princeton, N.J.: Princeton University Press.

Hakansson, Nils. 1969. "Optimal Consumption and Investment Strategies Under Risk, An Uncertain Lifetime and Insurance." International Economic Review, 10:443-466.

Hurd, Michael D. 1987. "The Poverty of Widows: Future Prospects," National Bureau of Economic Research Working Paper No. 2326.

Johnson, William R. and Jonathan Skinner. 1986. "Labor Supply and Marital Separation." American Economic Review, 76:455-469.

Kotlikoff, Lawrence J. and Avia Spivek. 1981. "The Family As an Incomplete Annities Market." Journal of Political Economy, 89:372-391.

Kotlikoff, Lawrence J. and Lawrence H. Summers. 1981. "The Role of Intergenerational Transfers in Aggregate Capital Accumulation." Journal of Political Economy, 89:706-732.

Landes, Elizabeth M. 1978. "Economics of Alimony." The Journal of Legal Studies, 7:35-63.

Leigh, Paul J. 1985. "Divorce as a Risky Prospect." Applied Economics, 17:309-320.

Leland, Hayne. 1968. "Savings and Uncertainty: The Precautionary Demand for Saving." Quarterly Journal of Economics, 465-473.

Mitchell, Olivia, and Gary Fields. 1982. "The Effect of Pensions and Earnings on Retirement: A Review Essay." In Ronald Ehrenberg (Ed.), Research in Labor Economics. Greenwich, Conn: JAI Press, 115-155.

Modigliani, Franco, and Richard Brumberg. 1954. "Utility Analysis and The Consumption Function: An Interpretation of Cross-Section Data." In Kenneth K, Kurihara (Ed.), Post-Keynesian Economics. New Brunswick, N.J.: Rutgers University Press.

Morgan, Leslie A. 1986. "Methodological Problems with Event Histories in Secondary Analysis of Longitudinal Data: The Case of Marital Transitions in the NLS." Report at the 39th Annual Scientific Meeting of the Gerontological Society of America, Chicago.

Peters, Elizabeth H. 1986a. "Marriage and Divorce: Informational Constraints and Private Contracting." American Economic Review, 76:437-454.

Peters, Elizabeth H. 1986b. "Interactions Between Divorce and Its Long-Term Economic Consequences." Econometric Society Meetings, New Orleans.

Preston, Samuel H., and John McDonald. 1979. "The Incidence of Divorce Within Cohorts of American Marriages Contracted Since the Civil War." Demography, 16:1-25.

Sandmo, A. 1970. "The Effect of Uncertainty on Saving Decisions." Review of Economic Studies, 37:353-360.

Skinner, Jonathan. 1987. "Risky Income, Life-Cycle Consumption and Precautionary Savings." National Bureau of Economic Research Working Paper No. 2336.

U.S. Department of Commerce, Bureau of Census. 1984. Projections of the Population of the United States, by Age, Sex, and Race, 1983-2080. Special Studies Current Population Reports P-25, No. 952.

U.S. Department of Commerce, Bureau of Census. 1986. Household Wealth and Asset Ownership:1984. Household Economic Studies, P-70, No.7.

U.S. Department of Health and Human Services, National Center for Health Statistics. 1986. Monthly Vital Statistics Report: Advance Report of Final Divorce Statistics, 1984. 35:1-10.

Weitzman, Lenore J. 1985. The Divorce Revolution. New York: Free Press.

Yaari, Menachem E. 1965. "Uncertain Lifetime, Life Insurance, and the Theory of the Consumer." Review of Economic Studies, 32:137-150.

Table 1. Compounded Value of $1000 Invested At the Beginning of Each of the First 7 Years of a Marriage

	Age	Savings Account[a]	Retirement Account[b]
$1000 Invested in	25	$1,036	$1,050
of Each of the First	26	$2,109	$2,153
Seven Years of Marriage.	:	:	:
	31	$8,084	$8,549
	32	$8,375	$8,976
No additional	:	:	:
$1000 Investments.	:	:	:
	:	:	:
	65	$26,907	$44,911
	:	:	:
	70	$32,111[c]	$57,319[d]

[a]Yield on Savings Account: exp [r(1-t)T], where r = 5% and t = .28.

[b]Yield on Individual Retirement Account: exp [rT], where r = 5%.

[c]If marital dissolution destroys early marital savings, an individual could save $1000 in a taxable savings program each of 21.19 years (beginning at age 48.81) to have $32,111 at age 70.

[d]If marital dissolution destroys early marital savings, an individual could save $1000 in an Individual Retirement Account each of 26.98 years (beginning at age 43.02) to have $57,319 by age 70.

Table 2. Example of the Wife's Share a Defined Benefit Pension Resulting from a Marriage Dissolution

Age	Husband's Salary[a]	
25	$10,000	
:	:	
29	$12,763)	
30	$13,401) = $40,235 / 3	= $13,412 = Average of Last 3 Years (Age 31 at time of dissolution)
31	$14,071)	
:	:	
:	:	
:	:	
63	$63,855)	
64	$67,048) = $201,303 / 3	= $67,101 = Average of Last 3 Years
65	$70,400)	

Calculation of Pension Benefits:

Individual A: Married all 40 years to the same spouse.

2% ($67,101) x 40 years = $53,681

Individual B: Married 7 years to first spouse then for 33 years has own earnings comparable to that of her former spouse.

[2% ($13,412) x 7 years] + [2% ($67,101) x 33 years] =

$1,877.68 + $44,287 = $46,165

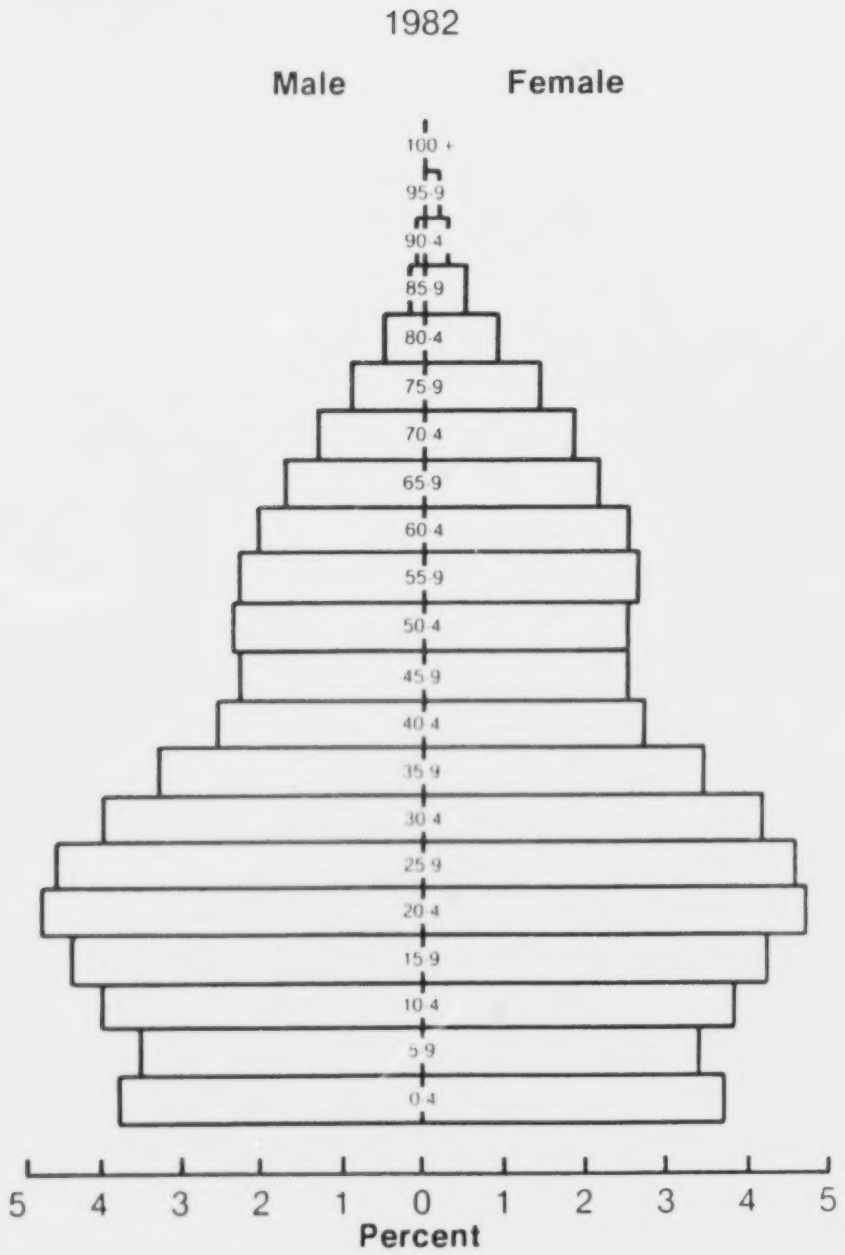
[a]Salary assumed to increase 5% per year.

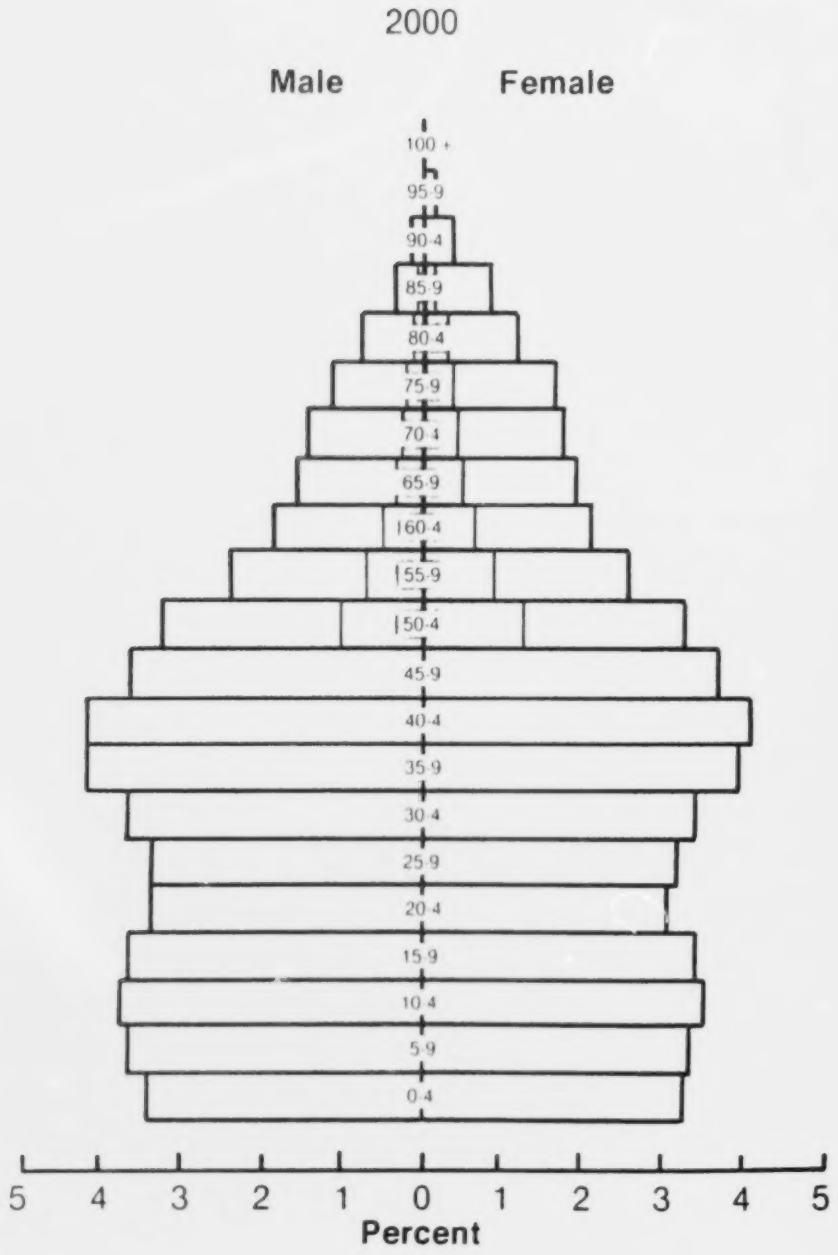
Table 3. Median Net Worth and Income By Age of Householder[a]

Individuals Less Than 35 Years Old	Median Monthly Income	Equity in Home	Total Net Worth
Married Couple	$2,077	$9,992	$14,742
Single Female	860	371	1,290
Single Male	1,300	927	3,716

[a]U. S. Bureau of Census, Current Population Reports, Household Wealth and Asset Ownership: 1984, Series P-70, No. 7, Washington, D. C.: U. S. Government Printing Office, 1986.

Figure 1. Proportion of the Population, by Age, Ever Divorced in 2000





Source: Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1980 to 2080*